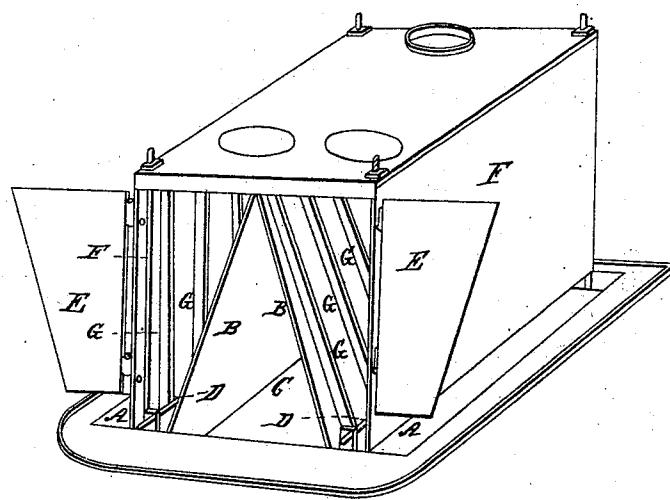


T. MILLS.

Heating Stove.

No. 411.

Patented Sept. 25, 1837.



# UNITED STATES PATENT OFFICE.

THOS. MILLS, OF HAVANA, NEW YORK.

## CONSTRUCTION OF STOVES.

Specification of Letters Patent No. 411, dated September 25, 1837.

*To all whom it may concern:*

Be it known that I, THOMAS MILLS, of Havana, Chemung county, and State of New York, have invented a new and useful Improvement on the Common Box-Stove for Warming Apartments.

This improvement consists in dispensing with the common bottom plate which is an extended hearth and substituting sunken narrow hearths A, A which serve as the bases of two plates B, B, set in an angular position that meet at the top plate and form an air chamber C between them. Within a short distance from the lower edge of these inclined plates perpendicular side plates F, F of the ordinary construction support a top plate having a space for the smoke pipe which is placed over the two chambers of combustion and being with or without apertures for the reception of vessels for cooking food or heating fluids or the admission of coal when used as fuel. These sides and top inclosing the inclined plates form chambers of combustion on the sides of the air chamber. The side plates are placed over the middle of the sunken hearths and the spaces between each side plate and inclined plate are provided with grates D, D, of any construction upon which the wood or other fuel is to be placed. The doors E, E and rear plate are made to correspond with the shape of the ends of the chambers of combustion leaving the ends of the air chamber open. On the inside of the perpendicular plates as well as on the sides of the inclined plates opposite, projections of metal G, G at suitable distances are placed to facilitate the draft and to augment the

heat. The whole can be supported by a common frame or legs.

Operation: Wood being placed in the chambers of combustion the weight of which brings it against the projections of the plates it being ignited at the bottom the heat is forced against the plates through the space created by the projections and continues to circulate with an increased force of heat until it arrives above the uppermost sticks in the chambers and then takes its direction to the pipe. By this operation a greater degree of heat is produced upon the plates than can be produced from a like quantity of wood upon the plates of the common box stove.

I do not wish to confine myself to the precise form of the various parts of this stove or to the inclination of the two inside plates but to vary the same in any manner substantially the same in principle.

What I claim as my invention and desire to secure by Letters Patent, is—

1. The making of two chambers of combustion by dividing the inside of the stove with two inclined plates, and leaving a space between them which is open at the bottom and ends through which the air circulates and becomes rarefied.

2. I also claim the projections on the inside of the plates and the double sunken hearths in combination, all as above described.

THOMAS MILLS.

Witnesses:

Jo. B. Wood,  
THOMAS CLATON.